



UNIVERSITY OF TORONTO
DIVISION OF UNIVERSITY EXTENSION
CONTINUING EDUCATION PROGRAMME
84 QUEEN'S PARK, TORONTO 181, ONTARIO

RADIATION OF MATTER

Offered in co-operation with the
TORONTO INSTITUTE OF MEDICAL TECHNOLOGY

TIME: Wednesdays, September 30 to December 16/70, January 6 to
January 20/71

PLACE: 3163 Medical Sciences Building

FEE: \$80.00 - 15 sessions

This course is for post-graduate Radiological Technologists in both Diagnostic and Therapeutic Radiology. It will be given under the direction of Dr. K. G. McNeill, Professor of Physics, and Dr. J. R. Cunningham, Associate Professor of Medical Biophysics.

Students will gain an up-to-date understanding of the effects of radiation on living tissue and will be able to practise this technology with greater personal safety and provide more efficient protective measures for patients in their care, as a result of participating in this course.

There will be two evaluations. Successful students will receive a Certificate issued by the Toronto Institute of Medical Technology.

The following is a summary of the topics to be considered:

Interaction of electromagnetic radiation with matter - photo electric and Compton effects, pair production, elastic scattering. Nuclear interactions.

Biological effects of radiation.

Detection of EM radiation, with laboratory demonstrations of different types of detector.

Measurement of radiation intensity, dosimetry.

., Interactions of particulate radiation (neutrons, protons, mesons),
with future possible applications.

Dose calculations with external and internal sources of radiation.

Absorption of radiation, attenuative coefficients.

Radiation protection.

